Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To:	Office of Chief Clerk	DATI	E: March 4, 2024
From:	Ruth Takeda Staff Attorney Environmental Law Divisior	l	
Subject:	Agenda backup – Executive Director's Response to Comments		
	Applicant: Proposed Permit No.: Program: Docket No.:	City of Corpus Christ WRPERM 13675 Water TCEQ Docket No. 20	

The Executive Director's Response to Comments is attached as backup for the **March 28, 2024 agenda**.

Please let us know if you have any questions or wish to discuss. I can be reached at 512-239-6635 or <u>ruth.takeda@tceq.texas.gov</u>. My co-counsel, Harrison (Cole) Malley, can be reached at 512-239-1439 or <u>harrison.malley@tceq.texas.gov</u>.

Thank you.

TCEQ DOCKET NO. 2023-1664-WR

APPLICATION NO. 13675 BY THE§BEFORE THE TEXASCITYOF CORPUS CHRISTI TO§OBTAIN A WATER USE PERMIT IN§COMMISSION ONSAN PATRICIO, NUECES AND§ARANSAS COUNTIES, TEXAS§ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO COMMENTS

The Executive Director (ED) of the Texas Commission on Environmental Quality (TCEQ) files this response to comments filed on Application No. 13675 from the City of Corpus Christi (City) for a water use permit in San Patricio, Nueces, and Aransas Counties, Texas. Requests for a contested case hearing were also filed, which the Executive Director addresses in a separate Response to Hearing Requests.

BACKGROUND

The TCEQ received this application on January 22, 2020. The application was declared administratively complete on May 5, 2020. Technical review was completed on January 4, 2021. Notice of the application was mailed by the TCEQ's Chief Clerk on March 19, 2021, to water right holders of record in the San Antonio-Nueces Coastal Basin. Notice of the application was published in the *Corpus Christi Caller Times* on April 6, 2021.

The comment period and hearing request period for this application closed on May 6, 2021. Due to significant public interest in this application, the comment period was reopened but the hearing request period was not re-opened. Approximately 275 individuals requested a public meeting and provided comments indicating the basis for their requests. The ED responded by scheduling a public meeting.

Notice of a virtual public meeting was mailed on October 15, 2021. The re-opened comment period closed at the conclusion of the public meeting held on November 16, 2021, but the comment period was subsequently extended to November 30, 2021, in response to several requests for an extension. Though comments from two commenters were received after November 30, 2021, the Executive Director includes them as a courtesy.

APPLICATION

The City of Corpus Christi (City) seeks authorization to divert and use not to exceed 186,295 acre-feet of water per year, at a maximum diversion rate of 257 cfs (115,349.31 gpm), from a diversion reach on La Quinta Channel (Corpus Christi Bay), San Antonio-Nueces Coastal Basin, for municipal and industrial purposes in San Patricio, Nueces and Aransas counties. The City also seeks an exempt interbasin transfer to the portion of San Patricio County in the Nueces River Basin and the portion of Nueces County in the Nueces-Rio Grande Coastal Basin within the City's wholesale water service area.

COMMENTERS

The following individuals and entities provided comments (written, oral or both) to the application. When substantially the same comments were provided more than once by a commenter, the comments have been treated as one submission. When substantially the same comments were provided by more than one individual, the individuals are referred to collectively as commenters. Businesses, groups, or organizations are referred to by acronym.

- 1. Eric Allmon, Ingleside on the Bay Coastal Watch Association (IOBCWA)
- 2. Carl Amsden
- 3. Peter Bella
- 4. David Bradsby, Texas Parks and Wildlife Department (TPWD)
- 5. Leigh Ann Brown
- 6. Sharon Kelley Burnett
- 7. Sylvia Campos
- 8. Eduardo Canales
- 9. Jardel Cancado
- 10.Elida Castillo
- 11.Thomas Cerwonka
- 12.Rosalinda Chapa
- 13.Adrian Clark
- 14. Jardel Costa
- 15.Ginny Cross
- 16.Roger Croteau
- 17.Tom Daley
- 18.Ellen Denham
- 19.Margaret (Peggy) Ann Duran
- 20. Jennifer Espino
- 21.Arthur (Art) Francis
- 22.Cathy Fulton
- 23.Guillermo Gallegos
- 24. Jennifer Garcia
- 25.Marilina Garza
- 26. Jose Gonzales or Gonzalez IV
- 27.Debbie Hammond

- 28.Chip Harmon
- 29. Jennifer Hay
- 30.La Lisa Hernandez
- 31.Wayne Heskew
- 32. Jennifer Hilliard
- **33**.Donna Hoffman
- 34.Wendy Lynn Hughes
- **35**.Elaine Jones
- **36**.Kenneth Jones
- 37. James Klein, Sierra Club Coastal Bend
- 38.Uneeda Laitinen
- **39.**Yvonne Landin
- 40. John Larue, United Corpus Christi Chamber of Commerce (Chamber)
- 41.Stefan Laurent-Faesi
- 42.Aaron Lebowitz
- 43.Thomas Ledesma
- 44.Leanne Lhirondelle
- 45. Janet Linzer
- 46.David Loeb
- 47. Juan B. Mancias
- 48.Brandon Marks
- 49.Madilyn Martinez
- 50.Kathryn Masten
- 51.Olimpia Isabel McAllister
- 52.Ronald L. McAlpin
- 53. Joe McComb
- 54. Jessika McFarland
- 55.Eli McKay
- 56. Juan Mejia
- 57.Pamela Meyer
- 58.Shauna Mondragon
- 59. Ann R. Nyberg
- 60.Patrick Nye

61.Isabel Ortiz

- 62.Leah Araiza Ortiz
- 63.Blanca Parkinson
- 64.Kristopher Parkinson
- 65.Robert (Bob) Paulison, Port Industries of Corpus Christi (PICC)
- 66.Christopher Phelan
- 67.Sandra Love Sanchez
- 68.Richard Alan Roark
- 69.Encarnacion Serna
- **70**.Christine Seward
- 71.Heather L. Shields
- 72.Abigail Stricker
- 73.Errol Summerlin
- 74.Kenneth Teague
- **75.**Chelsea Torres
- 76. Joshua Villarreal
- 77.Steven (Steve) L. Wilder
- 78.Susan (Susie) M. Wilder
- 79.Brian Williams, San Patricio Municipal Water District (SPMWD)
- 80. Joan Wolfe
- 81.Anne Iris Wright
- 82.Melissa Zamora

RESPONSE TO COMMENTS

GENERAL COMMENTS

COMMENT NO. 1: An individual thanked Senator Judith Zaffirini and Representatives J.M. Lozano and Abel Herrero for making a public meeting possible. An individual thanked Representative Herrero for requesting the public meeting and participating in the meeting.

Response to Comment No. 1: The ED acknowledges these comments and thanks all of the commenters for participating in TCEQ's public comment process.

COMMENT NO. 2: An individual encouraged TCEQ to have a second public meeting to allow everyone ample time to speak.

COMMENT NO. 3: An individual expressed concerns about public notice, proper public comment access and language access.

COMMENT NO. 4: An individual commented that the notice of the public meeting contained an error in the section on submitting public comments because it identified an incorrect permit number. The commenter asks TCEQ to provide the correct information to the public and extend the public comment period.

COMMENT NO. 5: An individual expressed concerns that panel members did not directly answer the public's questions.

COMMENT NO. 6: An individual commented that TCEQ's public permit review process is designed to pare down input and would like TCEQ to change its process entirely to include citizen input so citizens can understand the environmental and engineering aspects and TCEQ can understand the many larger citizen concerns about issues that affect their lives and health.

Response to Comment Nos. 2 - 6: The ED responds that public participation is an integral part of the permitting process and that a public meeting is not the only avenue for the public to express their concerns and ask questions. The public may also provide written comments to the TCEQ anytime during the public comment period. Notice of the application was mailed to water right holders on March 19, 2021. The City published notice of the application in the *Corpus Christi Caller Times* on April 6, 2021. Notice of the public meeting was issued on October 15, 2021, and the notice included information about attending the public meeting by telephone. Both notices included a toll-free phone number for individuals who needed more information or who needed information in Spanish. In addition, a public meeting was held on the application on November 16, 2021, and TCEQ provided a translator at the public meeting. During the public meeting, TCEO also provided instructions on how to make written comments. The TCEQ extended the comment period and in response to several requests for an extension did not close the comment period at the end of the public meeting, but instead accepted written comments on the application until November 30, 2021. The ED reviewed comments submitted after that date and, as a courtesy, includes them in this response. The TCEQ takes both oral and written comments into consideration during the permitting process before making a final decision on an application.

COMMENT NO. 7: PICC commented that a reliable supply of clean, fresh water is important to everybody in the Coastal Bay Region, and securing a new water supply that's drought resistant, stable, and affordable is critical to the future in the area. PICC commented that after the 2001-2013 drought information was incorporated into the water supply model for the Choke Canyon and Lake Corpus Christi Reservoirs, the firm yield was reduced by approximately 40,000 acre-feet, and shortly after that, the Lavaca-Navidad River Authority removed over 10,000 acre-feet. PICC commented that in the last 5 years the region lost 50,000 acre-feet of available water, and a new source will enable the City to meet the needs of current customers and supply initial potable water to serve future residential and commercial needs. PICC commented that the approach the City has taken is sound, and it is pertinent to pursue the water rights permit at this time. PICC supports approval of the application.

COMMENT NO. 8: SPMWD commented that it was created by the 52nd State Legislature in 1951 as a water provider in San Patricio County and supplies water to entities such as Aransas Pass, Gregory, Ingleside, Ingleside on the Bay, Odem, Portland, Rockport/Fulton, Taft, and Port Aransas jointly with the City. SPMWD also supplies potable water to Rincon Water Supply Corporation and Seaboard Water Supply Corporation as well as industrial process and untreated water to San Patricio industrial customers. SPMWD has been a customer and a partner with the City of Corpus Christi with regards to water. SPMWD has been working with the City of Corpus Christi over the last seven plus years on developing a drought proof water source. Securing new water supplies that are sustainable, affordable, and drought resistant is critical to the future of the region to meet the needs of current customers and allow for additional potable water to serve residential and commercial needs. SPMWD approved a resolution in support of the permit application.

COMMENT NO. 9: The Chamber provided comments in support of the City's application for additional funding from the Texas Water Development Board for desalination facilities.

COMMENT NO. 10: An individual commented that nothing is more critical to the future of Texas than to have sufficient water to meet the needs of residents and our growing economy. The potential for desalination of seawater as an affordable, dependable, uninterruptible water supply for the City of Corpus Christi and communities throughout Nueces County, San Patricio County, and beyond has been discussed for thirty-eight years and has been well vetted in the public and through the media. The commenter provided historical information on the discussions of desalination in Corpus Christi and drought conditions, including a booklet with a collection of local newspaper articles on drought in the 1980s, and supports granting the application.

COMMENT NO. 11: An individual commented on the City's efforts to look at options for additional water sources, including efforts to reduce consumption of all user types by encouraging conservation. The City also did a lot of work to find the least environmentally impactful sites for a new water source as well as how the City considered issues related to energy. The City has chosen sites where the existing distribution system is nearby and where present and or future use is concentrated, which minimizes pumping costs and energy use and avoids installing long transmission lines in potentially sensitive ecological areas. It is essential for the area to have well planned and designed water projects ready to build in the eventuality that more water is needed. The commenter supports granting the application.

COMMENT NO. 12: An individual commented in support of the desalination permit applications because they are a necessary and cost effective first step to reducing groundwater use and restoring Nueces River discharge into the bay system. The current drought is an indicator of the extreme load on available groundwater by population growth and suburban sprawl at the source of the rivers. Corpus Christi is contracted to drain the Nueces River dry through 2040 as their primary water supply source. Even in wet years of the past decade, Nueces discharge into the bay system has remained at zero. The bay system from Upper Laguna Madre to South Bay depends on Nueces discharge. This is caused by insufficient freshwater discharge and increased discharge of nitrogen and phosphorus fertilizers.

COMMENT NO. 13: Sierra Club Coastal Bend, IOBCWA, and individual commenters oppose the application and request that TCEQ deny the application.

Response to Comment Nos. 7 - 13: The ED acknowledges these comments.

COMMENT NO. 14: IOBCWA and individual commenters requested a contested case hearing.

Response to Comment No. 14: The ED responds that requests for a contested case hearing were received on this application and that they are addressed by the ED in a separate Response to Hearing Requests. The TCEQ Commissioners will consider the requests at an open meeting, referred to as a Commission agenda, and will decide whether to refer the application to the State Office of Administrative Hearings for a contested case hearing.

COMMENT NO. 15: Sierra Club Coastal Bend and individuals expressed concerns about desalination plants. Individual commenters were opposed to desalination projects in Corpus Christi Bay or its estuary systems. Sierra Club Coastal Bend commented that desalination does not provide a consistent water supply. Individual commenters commented on the cost of desalination plants. Individual commenters commented on financial, operational, and environmental issues at desalination plants in other states and countries. An individual commented that desalination plants are inefficient and expensive to operate and maintain.

COMMENT NO. 16: An individual commented on a publication - Sea Desalination - Is It Worth Its Salt? A Primer On Brackish And Seawater Desalination. The publication discusses environmental concerns such as brine disposal, impingement and entrainment, health concerns, increased energy use, the effects of fouling on performance of desalination plants and pretreatment to reduce fouling, and the high cost of desalination. An individual commented that desalination has the potential to increase fossil fuel dependence, increase greenhouse gas emissions, and exacerbate climate change if renewable energy sources are not used for freshwater production. An individual commented that desalination plants are international scams.

Response to Comment Nos. 15-16: The ED acknowledges the comments and responds that the TCEQ's jurisdiction over water rights permitting is established by the Legislature. Staff's review of a water rights application is conducted pursuant to specific requirements under applicable Texas statutes and rules and is based on the specific requests in the application. The ED believes that the proposed draft permit is protective of issues within TCEQ's jurisdiction over water rights permitting and notes that the draft permit was developed in accordance with applicable water rights statutes and rules.

COMMENT NO. 17: An individual asked about participation in the water rights permitting process by federal and state agencies such as the Environmental Protection Agency, the Coast Guard, the United States Army Corps of Engineers, the United States Fish and Wildlife Service and Texas Parks and Wildlife.

Response to Comment No. 17: The ED responds that under Texas Water Code, Chapter 5, TCEQ has the authority to issue water rights permits for use of state water subject to TCEQ's water rights permitting statutes and rules. Other state and federal entities have their own governing statutes and rules and the City would

need to comply with any applicable state and federal requirements governing its proposed project.

COMMENT NO. 18: Individuals commented on actions by the EPA related to permitting actions in other TCEQ programs. Individuals commented about the City's compliance history. An individual commented that TCEQ took action against the City for violating the Texas Water Code and asked whether TCEQ considered the City's track record. An individual commented that TCEQ should deny the permit application based on the City's track record of non-compliance with the Clean Water Act and the Texas Water Code.

Response to Comment No. 18: The ED responds that an applicant's compliance history is not part of TCEQ staff's review of a water rights application under applicable requirements, specifically Texas Water Code, Chapter 11, and TCEQ's water rights rules.

COMMENT NO. 19: Individual commenters expressed concerns that the purpose of use in the application is industrial use. Individuals commented that the application will bring more industry and more pollution to the area. An individual commented that the area is already heavily industrialized. An individual commented that citizens are not in need of additional water sources; industry needs the water. Individuals commented that granting the application would lead to more industrialization in the area, which will affect resident's health and the environment.

COMMENT NO. 20: An individual commented that there are no customers for the industrial water.

COMMENT NO. 21: An individual commented that the proposed desalination project benefits a small group of people, industry and their investors, at the expense of the environment and the people who live, play, and raise their families here in the Corpus Christi and the bay area.

COMMENT NO. 22: Individuals expressed concerns about industrial development in Corpus Christi and around Corpus Christi Bay and impacts to resident's quality of life.

COMMENT NO. 23: An individual commented that petrochemicals require vast amounts of water to cool their facilities, crack ethane into single use plastics, and generate hydrogen to make it appear they are achieving zero, net zero emissions and noted the 2021 IPCC report on climate change.

COMMENT NO. 24: An individual commented that desalination is promoted by industry to alleviate concerns about drought.

COMMENT NO. 25: An individual commented that the City has misrepresented the amount and the purpose of use to the community by promoting this desalination plant as a water management strategy but it will provide water permitted to industry.

Response to Comment Nos. 19 - 25: The ED acknowledges the comments and responds that industrial use is a beneficial use under applicable Texas Water Code provisions and TCEQ's rules. The ED further responds that TCEQ staff performed

technical reviews on this application for conservation, instream uses, and hydrology as required by the Texas Water Code and applicable TCEQ rules governing water rights. The ED believes that the proposed draft permit is protective of issues within TCEQ's jurisdiction over water rights permitting.

COMMENT NO. 26: Sierra Club Coastal Bend and individuals expressed concerns about the cumulative effects of the desalination plants in Corpus Christi Bay and ask why TCEQ did not do a cumulative impact study.

Response to Comment No. 26: The ED responds that staff's review of a water rights application is limited to the specific requirements under applicable statutes and rules, based upon the specific requests in the application. A cumulative impact study is not required by TCEQ's water rights statutes or rules. TCEQ staff followed applicable requirements in the Texas Water Code and TCEQ's rules in reviewing this application for a water rights permit and in developing their recommendations.

COMMENT NO. 27: Individuals expressed concerns about impacts to future generations. An individual commented that the water intake permit should be sustainable for seven generations before it can be issued.

Response to Comment No. 27: The ED acknowledges the comment and responds that TCEQ staff performed technical reviews for conservation, instream uses, and hydrology as required by the Texas Water Code and applicable TCEQ rules. The ED believes the proposed draft permit is protective of issues within TCEQ's jurisdiction over water rights permitting.

COMMENT NO. 28: An individual commented that TCEQ should listen to the people to whom it is accountable. An individual commented that it is TCEQ's responsibility to protect citizens and their rights and that the state of Texas is not doing that. An individual asked that TCEQ do its job and protect the environment and the community. An individual asked TCEQ to protect the citizens and taxpayers. An individual commented on TCEQ's mission statement and asked TCEQ to live up to its mission. An individual commented that TCEQ should be obligated to protect the health and safety of Texans, and the health and safety of Texas ecosystems.

Response to Comment No. 28: The ED responds that TCEQ continues to carry out its mission to protect our state's public health and natural resources consistent with sustainable economic development and that TCEQ's jurisdiction over water rights permitting is established by the Legislature. TCEQ staff performed technical reviews for conservation, instream uses, and hydrology as required by the Texas Water Code and applicable TCEQ rules. The ED believes the proposed draft permit is protective of issues within TCEQ's jurisdiction over water rights permitting.

COMMENT NO. 29: Individuals expressed concerns about actions of the Corpus Christi City Council. Individuals asked about funding sources for the project. An individual provided background information on past City of Corpus Christi projects that cost the City money and resulted in a potential superfund site. An individual commented that the project is not justified because the City is not using all of the water they currently have. An individual commented that the City of Corpus Christi does not have the expertise or knowledge to undertake a project of this complexity. COMMENT NO. 30: An individual commented that City officials stated that Corpus Christi has had adequate water supply even in times of drought since 1892 and that greed, industrial expansion, and poor leadership by city officials will destroy the bay.

COMMENT NO. 31: An individual commented that 4,000 signatures were collected from registered voters who wanted to have a say on whether the City should pursue desalination and the City never held a real townhall [sic] and repeatedly mispresented the permit and their water conservation plans.

COMMENT NO. 32: An individual commented that the City has not adequately maintained buildings and facilities and has neglected the maintenance of its wastewater system and asks whether the City will be able to maintain a desalination plant.

COMMENT NO. 33: An individual commented that the City is trying to build the plant in order to entice further polluting heavy industry into an area that is drought prone and environmentally sensitive because of short term economic benefit instead of the long-term health of the environment and its citizens.

COMMENT NO. 34: An individual commented that the City has consistently demonstrated extremely bad management and is unable to even maintain its own infrastructure and is illegally using tax dollars to fund private industry.

COMMENT NO. 35: An individual commented that the application should be denied because the City failed to secure funding for a desalination plant, and the low-interest loan from the Texas Water Development Board is for a different site.

COMMENT NO. 36: An individual asked why the City is the applicant instead of industry and why industry is not paying to construct the desalination plant.

Response to Comment Nos. 29 – 36: The ED acknowledges these comments and responds that TCEQ's role in the process is to evaluate the water rights application pursuant to applicable requirements. TCEQ has no role in or jurisdiction over the City's governance, its decision-making processes, determining what information the City provides to its citizens, or how the City funds its projects.

COMMENT NO. 37: Individuals expressed concerns about impacts to air quality. An individual commented that increased emissions will worsen climate change. An individual commented that increasing industry in the area will be detrimental to air quality and place the City out of attainment of federal guidelines given the large number of refineries and chemical plants already located in and around the bays, which will further burden businesses. An individual expressed concerns about health impacts from air quality. An individual expressed concern about a family member's asthma and potential health impacts of increased heavy industry in the area on that health condition, based on the Port of Corpus Christi's plans related to year-round water.

Response to Comment No. 37: The ED responds that TCEQ staff's review of the water right application did not include emissions, greenhouse gases, or other issues

related to air quality. The TCEQ's jurisdiction over water rights permitting is established by the Legislature. Consideration of air quality is not within the TCEQ's statutorily established jurisdiction over water rights permitting. The ED notes that the Port of Corpus Christi is not the applicant for this water rights application.

COMMENT No. 38: Sierra Club Coastal Bend commented that industries in the port discharge waste into Corpus Christi Bay, which will make the proposed intake inefficient and result in the introduction of dangerous chemicals into the Corpus Christi public water supply. An individual commented that industrial permit holders discharge chemicals that would be readily drawn into this intake and the water will then be sold to municipal water providers. The commenter also stated that the chemicals added to the seawater to enhance the desalination process to descale the pipes and other equipment have not been disclosed and considered for human environmental safety.

Response to Comment No. 38: The ED responds that TCEQ staff followed applicable requirements in the Texas Water Code and TCEQ's rules in reviewing this application for a water rights permit and developing their recommendations. Drinking water quality is not a factor considered in TCEQ staff's review under applicable TCEQ statutes and rules for water rights applications. The ED also notes that public drinking water is regulated by the TCEQ's Public Water System Supervision Program pursuant to provisions in the Texas Health and Safety Code and TCEQ rules that are at least as stringent as federal drinking water rules and are protective of human health.

COMMENT NO. 39: Sierra Club Coastal Bend and individuals expressed concerns about the amount of energy needed to operate the project. Sierra Club Coastal Bend commented that the amount of energy required for the project would produce extensive air and water emissions causing damage to the environment and area residents' health. The energy needed to operate this water intake system also will be extremely expensive, further burdening residential water rate payers in the area and that the Texas power grid is insufficient to handle such an enormous energy draw.

Response to Comment No. 39: The ED acknowledges the comments and responds that TCEQ's role in the process is to evaluate the water rights application pursuant to applicable requirements. The energy to operate a project and effects on the Texas power grid are not factors considered in TCEQ staff's review of a water rights application under applicable TCEQ statutes and rules.

COMMENT NO. 40: Individual commenters expressed general concerns about the environment and quality of life. An individual commented that Corpus Christi Bay is an estuary that is part of a larger system of estuaries along the Texas Gulf Coast and that what happens in one estuary will spread to them all. An individual asks that TCEQ carefully consider the negative health consequences to both young and old. An individual commented that the project will ruin their way of life and the bay. An individual expressed concerns about the impacts of prioritizing profit over the interest of people and the well-being and sustainability of the environment and impacts to the quality of life in the area. The individual asked that the industrial district, the City, and governmental agencies consider the environmental impact of their decisions. An individual commented that marine life in the area is important, not only because it is

beautiful, but because it brings in tourists and stimulates the economy. An individual commented that many residents moved to the area for the beauty of the bay, the birds, the fishing, and natural resources and their health depends on the health of the bay and ecosystem and of the seafood that they eat. The desalination plant will cause irreparable damage that will make this area less desirable to live in for not only the fish and wildlife but for people. An individual expressed concerns that the science is being ignored.

Response to Comment No. 40: The ED acknowledges the comments and responds that TCEQ staff followed applicable requirements in the Texas Water Code and TCEQ's rules in reviewing this application and developing their recommendations. Specifically, staff performed technical reviews for instream uses, hydrology, and water conservation. The ED believes that the proposed draft permit is protective of issues within TCEQ's jurisdiction over water rights permitting.

COMMENT NO. 41: An individual commented that Corpus Christi Bay is part of a unique system of bays and estuaries that has been protected for millennia by mother nature and Indigenous Peoples and commented on actions by the Port of Corpus Christi.

Response to Comment No. 41: The ED acknowledges the comment and notes that the Port of Corpus Christi is not the applicant for this water right permit.

COMMENT NO. 42: Individual commenters expressed concerns about dredging. An individual expressed concerns about impacts related to ship traffic near the facility. An individual commented that the project area is surrounded by neighborhoods that would be affected by the noise and light pollution. An individual expressed concerns about impacts from climate change and provided excerpts from a 2021 IPCC Report on Climate Change and a link to the full report and asks TCEQ to refer to the report in its decision making process. The link provided is <u>https://www.ipcc.ch/report/ar6/wg1/</u>.

Response to Comment No. 42: The ED acknowledges the comments and responds that TCEQ's role in the process is to evaluate the rights applications pursuant to applicable requirements. Dredging, ship traffic, noise and light pollution, and climate change were not factors included in the application and were not considered in TCEQ staff's review of the application under applicable TCEQ statutes and rules for water rights applications.

COMMENT NO. 43: An individual commented that TCEQ should conduct an Environmental Impact Study.

Response to Comment No. 43: The ED responds that an environmental impact study is not required for this water rights application. The ED further responds that TCEQ staff followed applicable requirements in the Texas Water Code and TCEQ's rules in reviewing this application for a water rights permit and in developing their recommendations.

COMMENT NO. 44: An individual commented that locating a desalination plant in Corpus Christi is partially about white supremacy and racism because the population of Corpus Christi is predominantly people of color. An individual expressed concerns about gentrification and environmental racism and impacts to many communities of color and low-income communities, which will be burdened with the hazards of toxic waste, facilities, pollution, traffic, and gentrification and asks that studies be conducted to determine the risk of increased illness and death due to desalination plants in nearby communities. An individual commented about environmental racism in Corpus Christi. An individual expressed concerns about unhoused people.

Response to Comment No. 44: The ED responds that water rights applications evaluated by the TCEQ are reviewed without reference to the socioeconomic or racial status of the surrounding community. The TCEQ is committed to protecting the health of the people of Texas and the environment regardless of location. Although there are no TCEQ water rights rules addressing environmental equity issues, such as the location of permitted facilities in areas with minority and lowincome populations, disparate exposures of pollutants to minority and low-income populations, or the disparate economic, environmental, and health effect on minority and low-income populations, the TCEQ has made a strong policy commitment to address environmental equity.

The TCEQ encourages participation in the permitting process. The Office of the Chief Clerk works to help the public and neighborhood groups participate in the regulatory process to ensure that agency programs that may affect human health or the environment operate without discrimination and to make sure that concerns are considered thoroughly and are handled in a way that is fair to all. You may contact the Office of the Chief Clerk at 512-239-3300 for further information.

COMMENT NO. 45: An individual commented that their family spends time at their property and expressed concerns that the desalination plant will be located near their property.

Response to Comment No. 45: The ED acknowledges the comment and responds that when reviewing water rights applications, the TCEQ considers only the criteria within its jurisdiction as set forth in applicable statutes and rules governing water rights. General proximity of property to a proposed water right is not included in the criteria governing water rights applications.

TEXAS PARKS AND WILDLIFE (TPWD)

COMMENT NO. 46: TPWD commented on the application and recommends the permit include provisions to limit impingement and entrainment from the diversion of water. Specifically, TPWD recommends that:

- diversions of marine seawater should not exceed flow-through velocities of 0.5 feet per second (fps), nor be co-located such that combined impacts in the surrounding approach area exceeds 0.5 fps;
- intake structure design should adjust or adaptively manage with varying flows and water quality that may occur at the intake site;
- intake structures should be designed to reduce the flow velocity so that marine organisms may escape being drawn into the intake;

- screens or booms, or both, should be used to exclude organisms from the intake; and
- a site-specific study of conditions at proposed intake locations be conducted to identify marine organisms at risk from intake operations and to inform the design planning process.

In addition, if feasible, directional drilling to install piping below the seabed and draw water down through a sandy bottom would prevent impingement of marine organisms on intake screens exposed to open water and prevent entrainment of other organisms carried with the feedwater through the intake screen.

Response to Comment No. 46: The ED thanks TPWD for its comments and responds that TCEQ staff's review of the application included an evaluation of environmental impacts associated with the application in accordance with applicable Texas statutes and TCEQ's rules related to water rights permitting. The ED's draft permit includes a special condition requiring the City to implement reasonable measures to reduce impacts to aquatic resources due to impingement and entrainment, and requires those measures to include, but not be limited to, screens on the diversion structure. The ED believes the special conditions included in the draft permit are sufficiently protective of aquatic resources.

WASTEWATER PERMITTING

COMMENT NO. 47: Individuals expressed concerns about the impacts of the discharge. An individual commented that you cannot consider the water rights permit without considering the discharge. An individual commented that the addition of concentrated brine to the bay ecosystem, particularly in estuaries, will have negative environmental impacts on the marine community as stated in the Harte Research Institute (HRI) Statement on Desalination Science. An individual commented that brine from the desalination plant will kill marine life and destroy the natural beauty of the area. An individual commented that the project would put salty wastewater into the bay system and will be dangerous to marine life which is the lifeblood of the local environment and economy. An individual commented that the Qadir study found that desalination plants produce 1.5 times more brine than they do desalinated water, so by producing forty million gallons of drinking water per day, the project will also be producing sixtynine million gallons of brine that will just be dumped back into the bay. The individual commented about the chemicals used to kill bacteria and prevent corrosion that will be in the brine and the temperature of the brine and asks how the diffusers will be able to adequately disperse the brine without any harmful effects.

COMMENT NO. 48: An individual commented that brine waste poses a potential threat to marine life and water quality, as it contains dangerously high concentration of salts and other minerals. Because of its high density and salinity, brine waste can accumulate in and around disposal areas smothering bottom dwelling species and significantly altering coastal ecosystems.

COMMENT NO. 49: Individuals commented that the brine reject should be returned to the Gulf of Mexico instead of to the bay.

COMMENT NO. 50: An individual expressed concerns about discharges into an established fishery with salinity sensitive marsh vegetation present because it will increase local salinity levels and elevate salinity in the Nueces estuary to the southwest. The City should use a better disposal method such as deep subsurface injection in an area without viable fresh water aquifers.

COMMENT NO. 51: Individuals expressed concerns about salty brine discharges mixing in with other waste from the industries in La Quinta Channel.

COMMENT NO. 52: An individual commented that although desalination is objectively a good technology for increasing drinking water in coastal areas, dumping excess salt into a bay that does not circulate water well will result in increased concentrations of salinity and will have profound impacts for the ecosystem, as well as those who rely on the fish, oysters and shrimp (both economically and for food security).

COMMENT NO. 53: An individual expressed concerns that the discharges will contaminate the water in the area of the intake because the current in the area is in constant motion and rotation and the flow of the bay water is in constant flux. The ebb and flow of the tides are affected by a number of factors, including but not limited to the time of day, seasons, and weather, and the currents flow against the tide.

Response to Comment Nos. 47 – 53: The ED acknowledges the comments and reiterates that this is a water rights application. Issues related to the City's wastewater application and any associated discharge were not considered in TCEQ staff's review of the water right application under applicable TCEQ statutes and rules for water rights. The ED also notes that a TCEQ wastewater permit application is a separate authorization and will be processed separately from this pending water rights application.

WATER PLANNING

COMMENT NO. 54: Individuals expressed concerns about consistency with the Regional Water Plan. An individual commented about the 2021 Regional Water Plan and noted that the only population increase was a justification for desalination but the only increase in the City of Corpus Christi is for industry. An individual commented that the treated water will be used for industrial purposes but justifies the request by stating that the water will be used for residential growth and the water is not needed for that purpose based on the Regional Water Plan. An individual commented that desalination is not efficient and will not solve regional water supply problems. An individual commented that the 2021 Regional Water Plan only included one desalination plant and the 2021 Regional Water Plan includes five plants and expressed concerns that the plans were being manipulated. An individual commented that the five seawater desal plants that were included in the 2021 region water plan as recommended water strategies were only included because they had sponsors, and despite numerous objections and concerns that were raised at the time, including insufficient water flow in the bay and in the channels.

COMMENT NO. 55: IOBCWA commented that the region has a surplus of water through 2060 with shortages thereafter only attributed to manufacturing demands. Even if a shortfall would occur the City has not looked at alternatives that are available to avoid

the devastating consequences that this proposed version would have upon Corpus Christi Bay.

COMMENT NO. 56: An individual commented that the application could affect other potential water management strategies in the Regional Water Plan that could be more affordable for economically disadvantaged residents.

Response to Comment Nos. 54 – 56: The ED acknowledges the comments and notes that Regional Water Planning Groups and the Texas Water Development Board are responsible for developing Texas' Regional and State Water Plans. TCEQ staff performed a water conservation review pursuant to applicable TCEQ requirements and determined that the application is consistent with the 2016 Region N Water Plan and the 2017 State Water Plan. In addition, TCEQ staff also reviewed the draft 2021 State Water Plan and considered information provided by the Region N Planning Group in making its consistency determination. TCEQ has no role in or jurisdiction over the recommendations or decisions of the Regional Planning groups.

ALTERNATIVES TO THE APPLICATION

COMMENT NO. 57: Individuals commented that other alternatives to the project should be considered. Individuals commented that the discharge and intake should be located offshore.

COMMENT NO. 58: An individual commented that the City has performed studies on desalination and have not followed the advice of the scientists they hired to perform the studies. The City is ignoring lessons learned from prior pilot studies, which listed the La Quinta Channel location on shore surface intake as the last of twelve studied intake options. The first two options were in the Gulf of Mexico. The South Padre Island pilot study determined that the Gulf of Mexico would supply more consistent raw water quality and minimize the environmental impact of a full scale raw water intake. An individual commented that state agencies and universities recommend that the intake be located offshore.

COMMENT NO. 59: Individuals commented that rainwater collection should be considered. An individual commented that rainwater collection and water conservation would be better financial options. An individual asked the City to investigate water conservation and rainwater retention.

COMMENT NO. 60: An individual commented that the City should fix the Mary Rhodes Pipeline, find ways to prevent evaporation of over 160 million gallons a day of water from its two reservoirs, and thoroughly consider all other options before putting the bay at risk.

COMMENT NO. 61: An individual commented that fresh and brackish groundwater are only a fraction of the cost of desalination but are also drought proof and reliable. Groundwater from near Sinton is available now. There are billions of gallons of drought proof brackish groundwater available that is totally being ignored. COMMENT NO. 62: An individual commented that the City could treat processed sewage water from wastewater treatment plants much more economically.

COMMENT NO. 63: An individual commented that water conservation, water use efficiency, storm water capture and reuse, and recycled water expansion are proven effective strategies to increase regional water supplies and often cost less than desalination. In addition, these alternatives provide pollution abatement, habitat restoration, and flood control benefits, which are commonly overlooked during cost/benefit assessments.

Response to Comment Nos. 57 – 63: The ED responds that staff's review of a water rights application is limited to specific requirements under applicable statutes and rules, and is based on the specific requests in the application. The suggested alternatives were not submitted as part of the City's application.

COMMENT NO. 64: An individual commented that area scientists, including from Texas Parks & Wildlife, the General Land Office, the UT Marine Science Institute, and the Harte Research Institute have said in published reports that seawater desalination intake and discharge should only occur in designated areas offshore in the Gulf. There is even an expedited permitting process for this. The individual asks why the City's application is located in the bay and why the City is not using the expedited permit process. An individual commented that the Harte Research Institute concluded that an offshore location for intake and discharge would be the best option to minimize impacts on biota, habitats, and water quality. Locations within the bay present many more potential environmental concerns that may not be easily minimized or mitigated. The study discussed the best available means for minimizing biophysical impacts for proposed sites. Placement of pipelines to offshore locations from shore locations is a well understood engineering activity, and of low environmental risk. Resource and permitting agencies also recognize this and provide guidance to this effect, even expediting permitting outside these sensitive areas. These are summarized in the Marine Seawater Desalination Diversion and Discharge Zones Study as a requirement of House Bill 2031 (84th Legislature).

Response to Comment No. 64: The ED responds that House Bill 2031 (84th Legislative Session) created an alternative expedited process in Texas Water Code, Chapter 18 for obtaining an authorization to divert marine seawater and did not affect the authority of a person to divert marine seawater from a bay or estuary under Texas Water Code, Chapter 11. The ED has no role in an applicant's decision to apply under the expedited process in Chapter 18 or under TCEQ's authority to issue a water right under Chapter 11.

COST OF THE PROJECT

COMMENT NO. 65: Individual commenters expressed concerns about the cost of the project. Individuals expressed concern about impacts to utility rates. An individual commented that the project should not be a financial burden on the residents.

COMMENT NO. 66: An individual commented that much personal income in the City comes from the service industry, which has been affected by the pandemic. The community is composed of mostly economically disadvantaged people, many who are

struggling with the cost of basic necessities such as rent, electricity and rising water rates. The City already has a large amount of homeless and displaced individuals. The individual asks whether, in addition to exploiting and polluting the community's natural recreation areas and water bodies, the TCEQ and the City are working together in an effort to further burden economically disadvantaged ratepayers with the cost of funding a billion dollar desalination plant for industry.

Response to Comment No. 65 - 66: The ED acknowledges these comments but responds that the cost of the project was not considered in TCEQ staff's review of the application under applicable TCEQ statutes and rules. The ED notes that issues related to project costs are presented during the regional planning process.

ECONOMIC IMPACTS

COMMENT NO. 67: Individuals expressed concerns that granting the application will affect the economy. An individual commented that desalination will not create jobs and improve the economy because desalination will kill the bay. An individual commented that granting the application would affect their future economic opportunities. An individual expressed concerns that short term economic growth was more important than the longevity of families and their health.

COMMENT NO. 68: Individuals expressed concerns about impacts to the tourism industry. An individual commented that tourism money will decrease because of the stigma that the desalination plant will bring. An individual commented that the project will result in financial hardship to businesses because it will cause decline in recreation and tourism. An individual commented that a large part of the economy in the area is based on tourism and fishing and granting the application would affect the ecosystem and fish.

COMMENT NO. 69: An individual commented that the bay, channels, and oceans are resources that if not maintained will provide economic devastation to the economy of Corpus Christi, as well as irreparably damaging the sea life and everything dependent on clean water.

COMMENT NO. 70: An individual commented that the project would affect their business, which relies on health of all forms of sea life found in the area.

COMMENT NO. 71: An individual commented that desalination plants inside Corpus Christi Bay are being pursued at taxpayer expense in order to minimize costs for industry while sacrificing aquatic life, as predicted by area environmental scientists. An individual commented that the City is locating the facility inside the sensitive Corpus Christi Bay merely because it costs less for industries to connect to than going offshore.

COMMENT NO. 72: An individual commented that the project does not represent sustainable economic development in accordance with TCEQ's mission. An individual commented that there has been too much focus on economic development and not enough on the environment. Response to Comment Nos. 67 – 72: The ED responds that TCEQ staff's review of water right applications does not require consideration of economic impacts. The TCEQ's jurisdiction over water rights permitting is established by the Legislature. The TCEQ does not have the authority to address these types of issues as part of the water rights permitting process. Texas Water Code, Chapter 11, and applicable water rights rules and requirements do not authorize the TCEQ to consider issues such as the local economy and tourism.

WATER RIGHTS PERMIT APPLICATION

COMMENT NO. 73: IOBCWA commented that the application does not contain the level of specificity required by TCEQ rules. The purpose of use water is not stated in the definite terms, the location of use is not specifically stated and the application does not describe the location of return or surplus flows.

COMMENT NO. 74: An individual asks why TCEQ did not require the City to correct the purpose of use in its application.

COMMENT NO. 75: An individual commented that the application contained several deficiencies.

Response to Comment Nos. 73 – 75: The ED responds that TCEQ staff followed the applicable requirements in the Texas Water Code and TCEQ's rules in reviewing the application. The ED's proposed draft permit complies with Texas Water Code, Chapter 11 and TCEQ's rules in 30 Texas Administrative Code Chapters 288, 295, 297, and 298, which are the applicable statutes and rules relating to water rights and water rights permitting.

COMMENT NO. 76: An individual commented that the conservation review of the application was deficient because the City has a routine practice of allowing large industrial users to avoid any conservation measures or reduction in use during drought, until extreme drought is reached and requests that the draft permit be revised to restrict the City from offering incentives to any users, industrial or otherwise, to avoid curtailment during times of drought.

COMMENT NO. 77: An individual commented that the amounts in the City's application differ from those in the Region N Water Plan and asks why TCEQ allowed the City to submit an application that differs from the plan and asks why TCEQ granted a waiver from the requirements in its rules relating to consistency with the Regional Water plan.

Response to Comment No. 76 - 77: The ED responds that TCEQ staff performed a water conservation review of the application pursuant to applicable requirements. Staff's review found that the City's Water Conservation Plan and Drought Contingency Plan, which were submitted with the application, met the requirements in TCEQ's Chapter 288 rules. Staff's review evaluated the application for consistency with the Regional and State Water Plans and found that the application was consistent with those plans. TCEQ did not grant a waiver from the consistency requirement because the program staff found that the application was consistent with the Regional Water Plan.

COMMENT NO. 78: An individual commented that if the permit is granted it should include the following conditions: design of intake structures using best available technology and in accordance with section 316b of the Clean Water Act; development of environmental flow standards for La Quinta Channel; submission of a water and air monitoring plan; establishment of a desalination damages fund to compensate communities harmed by desalination; and other conditions such as those in the California Ocean Plan Desalination Amendment.

COMMENT NO. 79: An individual commented that the application did not include information about the aesthetics of Corpus Christi Bay and commented that the communities and area in close proximity to the location of the application are areas of outstanding natural beauty and should be protected by the TCEQ.

Response to Comment Nos. 78 - 79: The ED responds that TCEQ staff's review of the application included an evaluation of environmental impacts associated with the application. TCEQ staff's environmental review was performed in accordance with applicable Texas statutes and TCEQ's rules related to water rights permitting. The ED's proposed draft permit includes special conditions to protect the environment, including a provision requiring screens on the intake structure. The ED believes that the proposed draft permit is protective of the environment.

COMMENT NO. 80: IOBCWA commented that by rule any permit issued must be consistent with the goals and policies of the Texas Coastal Management Program or CMP and that issuing the permit does not achieve the maintenance of a proper ecological environment and health of the marine resources as required by the Coastal Management Program policies for appropriations of water. IOBCWA commented that TCEQ is required to administer its permitting program for maximum conservation protection of the quality of the environment and natural resources of this state as acknowledged by the Coastal Bend Regional Plan. The environmental degradation that would result from the City's exercise of this water right when other alternatives are available is inconsistent with judicious use and maximum conservation of the ecological resources of the bay.

Response to Comment No. 80: The ED responds that TCEQ staff evaluated the application for consistency with the CMP and found that the application was consistent with the goals and policies of the CMP.

COMMENT NO. 81: An individual commented about an email from the City to TCEQ asking TCEQ to revise the technical memo.

Response to Comment No. 81: The ED responds that TCEQ staff performed a hydrology review of the application in accordance with applicable Texas statutes and TCEQ's rules related to water rights permitting. The hydrology technical memorandum was revised on January 4, 2021, to correct a typographical error.

ENVIRONMENTAL CONCERNS

COMMENT NO. 82: Individuals expressed concerns about potential environmental impacts from the application. An individual commented about the effects of desalination on the bay and aquatic life. An individual commented that the application

will threaten the entire ecosystem of Corpus Christi Bay. An individual expressed concerns about what will happen to the bottom of the closed shallow bay system as the result of the application. An individual expressed concerns about impacts from the location of the project in a closed bay system, including turbidity. An individual commented that Corpus Christi Bay is guite shallow and has a narrow outlet and the desalination plant would be harmful to all forms of life, from microscopic larvae to small and large fish and seagrasses and to overall water quality. An individual commented that the La Quinta ship channel is not seawater, it is a semi-closed bay system and a sensitive estuary, a mixture of fresh and salt water that is fed in though the Gulf. An individual commented that the City has not conducted hydrology studies to demonstrate that this project will not cause catastrophic impact to the bay ecosystem. An individual commented that the project is a threat to the entire ecosystem of Corpus Christi Bay because of the release of chemicals from treating the water and discharging salty brine back into the bay contaminates fish and turtles, ills seagrass, and puts all aquatic life at risk by disrupting the natural balance of the ecosystem.

COMMENT NO. 83: An individual commented that local scientists at the Harte Research Institute and the University of Texas Marine Science Institute state that seawater desalination in a shallow enclosed bay system is likely to have significant negative impacts to vulnerable marine resources. An individual commented on a newspaper article about a Harte Research Institute position paper and expressed concerns that toxic chemicals, heavy metals and the impacts of discharge of hot brine were not studied. The commenter expressed further concerns about a Freese and Nichols study that only focused on salinity issues and their impact on a very narrow group of highly adaptive sport fish species.

COMMENT NO. 84: Individual commenters expressed concerns about red tide.

COMMENT NO. 85: An individual expressed concerns about rising salinity levels during the summer and impacts to water quality.

COMMENT NO. 86: An individual commented that although many, including the Port of Corpus Christi, state that this ship channel is already too badly polluted that nothing lives in it, local residents have seen dolphins, turtles, and fish. An individual commented that the La Quinta Channel is an active area for dolphin and is a spawning area for redfish, speckled trout, black drum, and a multitude of others as well as a nesting area for great blue herons and roseate spoonbill wading birds. An individual commented that there has been no due diligence regarding native endangered species and habitats that may be in the area.

COMMENT NO. 87: An individual provided copies of reports and studies:

- Coastal Bend Bays & Estuaries Program (CBBEP) report, CBBEP Publication 153, Project 2120, entitled "Vulnerability Assessment of Coastal Bend Bays": <u>https://www.cbbep.org/manager/wp-content/uploads/2120-Final-Report_FINAL.pdf;</u>
- A presentation made to the City as part of a workshop on desalination. <u>https://911b6eea-40b9-4e8f-a629-</u>

<u>587ff8e166fe.filesusr.com/ugd/0673fd_497f3f82e2e542a3917cacdf76bdc167.p</u> <u>df;</u>

- A 2021 IPCC Report on Climate Change available at https://www.ipcc.ch/report/ar6/wg1/;
- The IOBCWA's comments on the Region N Water Plan;
- A presentation about CORMIX anomalies;
- A press release from the Port of Corpus Christi about its container terminal operations;
- A copy of Texas Parks and Wildlife Department's comments on the application;
- A copy of an April 1, 2020, memorandum from Freese and Nichols to the City about the intake;
- A 2015 report by Gregory Stunz and Paul Montagna on Identification and Characterization of Potential Environmental Impacts Mitigation Measures Related to Intake and Discharge Facilities of Seawater Desalination Plants;
- An excerpt from the 2016 Oil Spill Planning and Response Atlas for Port Ingleside;
- A 2021 NYU Environmental Journal article, The End Environmental Externalities Manifesto: A Rights-Based Foundation for Environmental Law, by E. Donald Elliott and Daniel C. Esty;
- A copy of the Ingleside on the Bay City Council resolution; and
- The 2018 study by Texas Parks and Wildlife Department and the General Land Office on Marine Seawater Desalination Diversion and Discharge Zones.

COMMENT NO. 88: An individual commented that the project, including industries locating in the area, will cause devastation to sea grasses and wildlife and cause further damage to the ecosystem previously allowed by industrial intrusion to this area. An individual expressed concerns about impacts to the life cycle of sea grasses in the area, which are a vital part of the food chain.

Response to Comment Nos. 82 – 88: The ED acknowledges these concerns and thanks the commenters for providing information. The ED responds that TCEQ staff's review of the application included an evaluation pursuant to applicable requirements of environmental impacts associated with the application. TCEQ staff's environmental review was performed in accordance with applicable Texas statutes and TCEQ's rules related to water rights permitting. The ED's proposed draft permit includes special conditions to protect the environment, including a provision requiring screens on the intake structure. The ED believes that the proposed draft permit is protective of the environment.

COMMENT NO. 89: An individual commented that the estuarine system is not a sound ecological environment because freshwater inflows are not adequate as the Nueces BBEST concluded in 2012. Withdrawal of water from the La Quinta Channel negates the environmental benefits to bays and estuaries that were created by freshwater inflows, which the Texas Water Code protects.

COMMENT NO. 90: An individual commented that TCEQ stated that instream flow requirements is the amount of flows or releases necessary to maintain the health and integrity of estuarine ecosystems. According to the Texas Water Development Board the Nueces Estuaries located in the Coastal Bend Region of Texas consist of Nueces Bay, Corpus Christi Bay, and Oso Bay. The estuary typically receives an average of 587,000 acre-feet of freshwater inflow per year from its major contributing river the Nueces River.

Response to Comment Nos. 89 - 90: The ED responds that TCEQ staff performed a hydrology review of the application in accordance with applicable Texas statutes and TCEQ's rules related to water rights permitting. The hydrology review evaluated whether the application would affect the adopted freshwater inflow standards and found that the application did not impair the standards.

IMPINGEMENT AND ENTRAINMENT

COMMENT NO. 91: Sierra Club Coastal Bend, IOBCWA, and individuals expressed concerns about impingement and entrainment. Sierra Club Coastal Bend commented that locating the diversion point in the La Quinta Channel will be problematic because of impingement and entrainment of benthic organisms, particularly benthic organisms in the channel. Killing benthic organisms would impact the sporting fish population and recreation interests. IOBCWA commented that impingement and entrainment are potential impacts this application would have upon sensitive aquatic environments. IOBCWA commented that desalination would require careful consideration of the siting of the plant and its appurtenances, and the City has not provided details regarding the design and operation of the intake structure it intends to utilize to withdraw water. That design is important in determining whether species in the bay will be properly protected.

COMMENT NO. 92: An individual commented that the permit would take an extraordinary amount of water from La Quinta Channel creating a suction that will kill sensitive wildlife and sensitive larvae, and fish eggs which will impact all the wildlife in this sensitive area, as well as affect the fishing by residents and the bird species. The area is in a major migratory path for birds, thus endangering more species due to lack of food and habitat loss.

COMMENT NO. 93: An individual commented that the intake locations chosen by the City are based solely on economy and not on environmental impact. There is no analysis of the amount of larvae, eggs, and other species of fish.

COMMENT NO. 94: An individual commented that the intake will threaten motile faunal species including shrimp larvae, fish larva, even oyster beds and that the diversion location is in a sensitive estuarine environment.

COMMENT NO. 95: An individual commented that many sport fish such as redfish, trout, flounder, and drum as well as bait fish such as pin perch, shrimp, mullet, and shad are found in the La Quinta channel, and the proposed intake will have irreversible impacts on the natural ecosystem in the area because of impingement and entrapment within the system.

COMMENT NO. 96: An individual commented that desalination surface water intakes are a threat to marine life because mature fish, larvae, and other marine life can be significantly injured or killed when they become trapped or sucked into open water surface intake pipes. The individual further commented that the California State Water Resources Control Board estimates that open ocean intakes used by coastal power plants in California kill seventy billion fish larvae and other marine life on an annual basis.

COMMENT NO. 97: An individual commented that the information in the application is incomplete and also does not take the ecosystem into consideration because crustaceans and native fish live in the area and based on their sizes at various stages of development, could easily slip through the openings of the proposed protective screens.

COMMENT NO. 98: Individuals commented that the application must comply with Chapter 316 of the Clean Water Act because the water will be provided for industrial cooling.

COMMENT NO. 99: An individual commented that a key issue that dominates the intake selection process is the need to minimize impingement and entrainment. Impingement and entrainment are subject to federal regulation by the US EPA Clean Water Act concerning cooling water intakes which sets a standard for seawater desalination intakes. The City states they will use reasonable measures to minimize the impact of aquatic resources due to impingement and entrainment but reasonableness is very subjective. The commenter requests that TCEQ follow the Clean Water Act requirements for the location, design, construction, and capacity of the intake structures to reflect the best technology available to minimize impingement and entrainment. The screen size will allow a large amount of larvae, eggs, and small marine creatures to be entrained. Passive screens have a proven ability to reduce impingement and entrainment. Their effectiveness is related to their slot width and low flow-through velocity. It has been demonstrated that 1mm openings are highly effective for larval exclusion and reduce entrainment by 80% or more. The commenter requests that the City reduce the slot size of the screens to 1mm and maintain the .5 feet-per-second flow rate or provide a complete analysis as to why the smaller slot size would not work.

Response to Comment Nos. 91 – 99: The ED responds that TCEQ staff's review of the application included an evaluation of environmental impacts associated with the application in accordance with applicable Texas statutes and TCEQ's rules related to water rights permitting. The ED's draft permit includes a special condition requiring the City to implement reasonable measures to reduce impacts to aquatic resources due to impingement and entrainment, and requires those measures to include, but not be limited to, screens on the diversion structure.

RECREATION

COMMENT NO. 100: Sierra Club Coastal Bend and individual commenters expressed concerns about the effect of the application on recreation. Sierra Club Coastal Bend commented that the application would damage the local sport fishing industry and everyone who recreates on or near Corpus Christi Bay. Individual commenters commented on sport and recreational fishing, beach activities, recreational navigation, kayaking, boating, kitesurfing, swimming, training areas for youth running teams, noncontact recreational uses, dolphin touring, birdwatching, and boating access as well as businesses that support these types of activities.

Response to Comment No. 100: The ED acknowledges the comments and responds that TCEQ staff's review of the application did not consider impacts to recreational uses in the area of the application. The TCEQ's jurisdiction over water rights permitting is established by the Legislature. The issues raised by the commenters are not within the TCEQ's statutorily established jurisdiction over water rights permitting.

CULTURAL RESOURCES

COMMENT NO. 101: An individual commented that the land was previously used for farming and fishing, and used to be and still is Native Indigenous People's land. An individual commented that Corpus Christi is the ancestral homeland of the Karankawa and Lipan-Apache People. An individual commented that the proposed location is near the traditional lands of the Karankawa people, where destabilizing the bio productivity of the region will also have negative effects on them. An individual commented that the project would disturb ancestral lands of the local indigenous communities. An individual commented that access to sacred tribal land and traditional homelands by the Indigenous peoples of the surrounding areas - the Esto'k Gna, the Original People of Texas, will be further impacted by the impacts of the project on nature.

COMMENT NO. 102: An individual commented that there has been no due diligence regarding archeological sites that may be in the area.

COMMENT NO. 103: An individual commented that TCEQ has not consulted with the Native Original People of this land and why Native people are often not given the opportunity to speak at public hearings. The Esto'k Gna has precedence as a coordinating agency to both state and federal bodies regarding matters that would impact the coastal land within the borders of Texas, which was built upon the Tribe's ancestral and sacred homeland, ceremonial sites, and burial grounds.

Response to Comment Nos. 101 - 105: The ED acknowledges the comments and responds that when reviewing water rights applications, the TCEQ considers only the criteria within its jurisdiction as set forth in applicable statutes and rules governing water rights.

Respectfully submitted,

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Kelly Keel Executive Director

Erin E. Chancellor, Director Office of Legal Services

Charmaine Backens, Deputy Director Environmental Law

Tateda by

Ruth Ann Takeda State Bar of Texas No. 24053592 TCEQ Environmental Law Division, MC 173 P.O. Box 13087 Austin, Texas 78711-3087 ruth.takeda@tceq.texas.gov Phone: 512.239.6635 Fax: 512.239.0626

an Chil

Harrison Cole Malley, Staff Attorney Environmental Law Division State Bar No. 24116710 P.O. Box 13087, MC 173 Austin, Texas 78711-3087 Phone: (512) 239-1439 Fax: (512) 239-0626

ATTORNEYS FOR THE EXECUTIVE DIRECTOR

CERTIFICATE OF SERVICE CERTIFICATE OF SERVICE

I certify that on the 4th day of March, 2024, a true and correct copy of the foregoing *Executive Director's Response to Comments* was filed with the Chief Clerk of the Texas Commission on Environmental Quality in Austin, Texas.

Kuth A. Taleda

Ruth Ann Takeda, Staff Attorney Environmental Law Division Texas Commission on Environmental Quality